

Rochester Energy Commission

August 12th, 2020

Welcome Back!

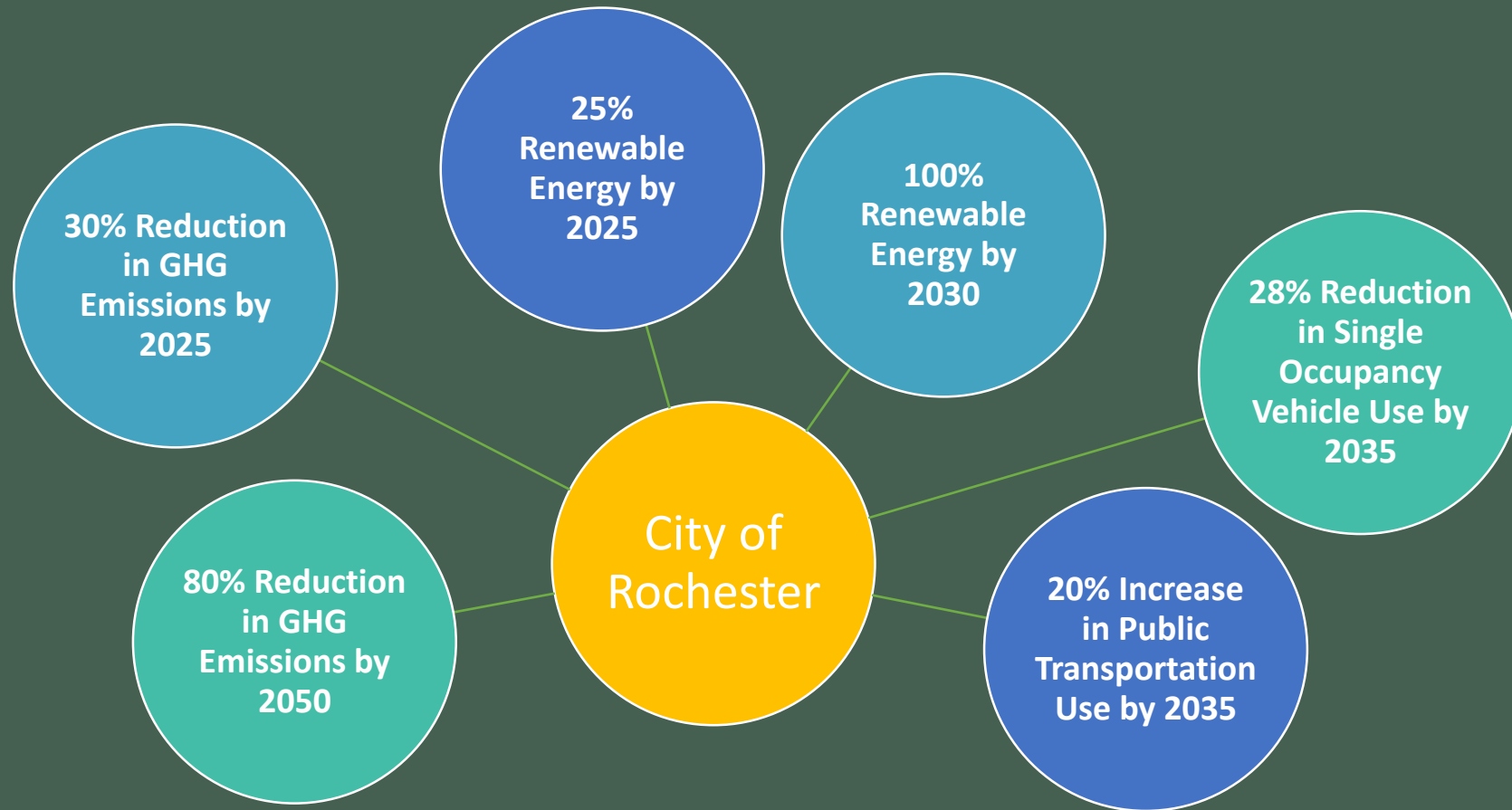
Agenda

- Old Business
 - Energy Commission Vacancy Update
 - City Council Representative Update
 - Sustainability & EAP Update for City Council
 - DES Update for City Council
 - Review Webpage Outline
- New Business
 - Overview of City Green Team
- EAP Priorities – Actions and Strategies
 - Review Update Tracking Spreadsheet
 - Review Transportation Actions & Strategies Research

Old Business

- Energy Commission Vacancy Update
- City Council Representative Update

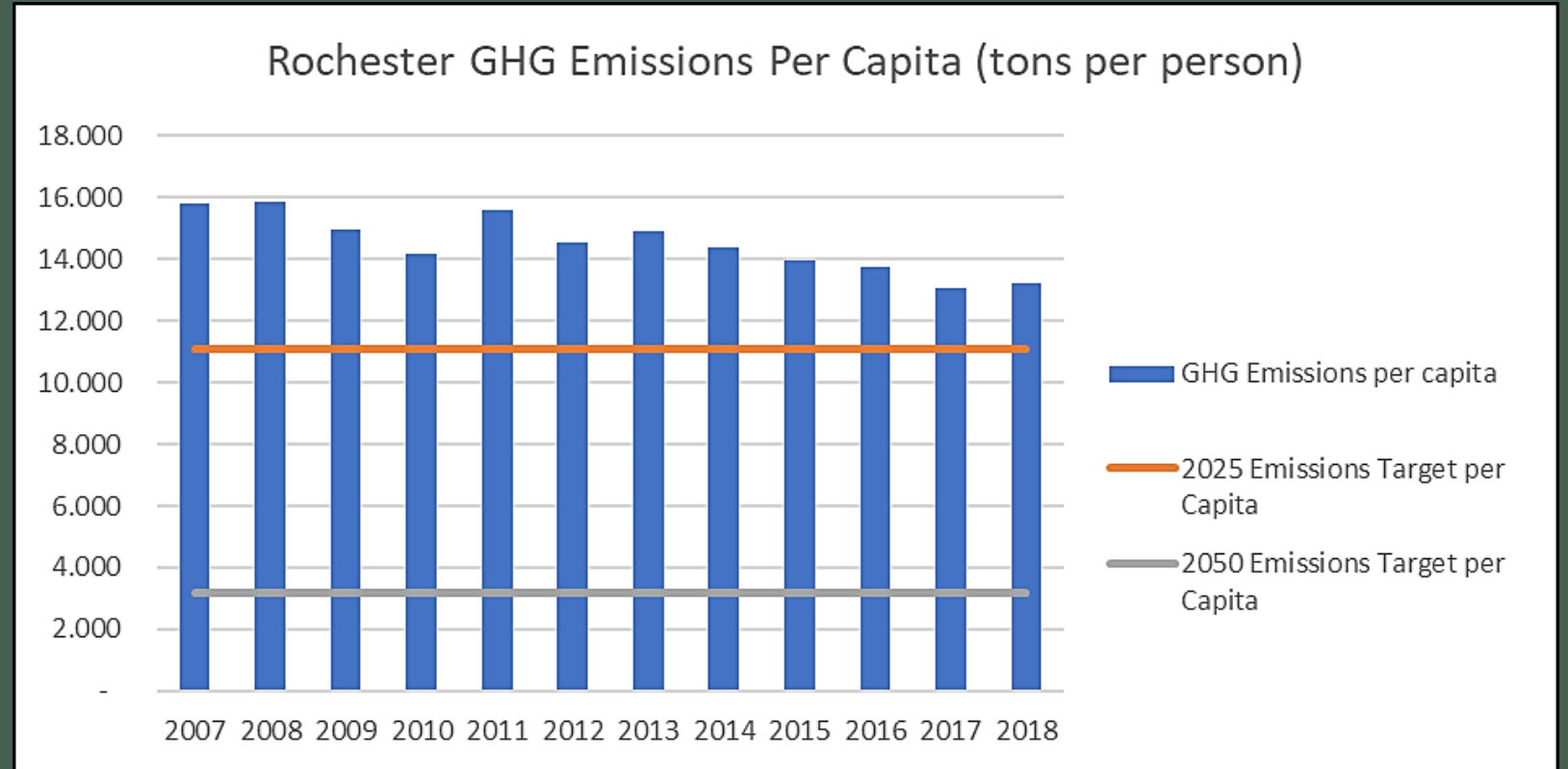
Old Business: EAP Update for City Council



Old Business: EAP Update for City Council

Goals

- ▶ 1.5% annual retail energy savings
- ▶ 25% renewable energy by 2025
- ▶ GHG emissions reductions of:
 - 15% by 2015
 - 30% by 2025
 - 80% by 2050



*Includes travel, waste and energy emissions

▶ 16% reduction in GHG emissions since 2007

▶ 22% reduction in energy emissions since 2007

Old Business: DES Update for City Council

Purpose

- Provide an update of the system evaluation analyses
- Propose a recommended path forward for City building heating and cooling needs

Why are we evaluating the building's heating and cooling needs?

- City buildings are heated (and cooled) by a steam line connected to the Olmsted County Waste to Energy Facility (OWEF)
- Steam line has reached the end of its useful life and costs (\$30M) to replace



Project Approach	First Cost (\$)	Operating Cost (\$)	Energy Savings (%)	GHG Savings (metric tons)	Simple Payback (yrs)
OWEF – Replace in kind	\$30M	-	-	-	-
OWEF – Install HHW/ CHW system	\$45M	-	-	-	-
Buildings – Steam Heat and Cooling (baseline)	\$6.3M	\$634,873	-	4,193	-
Buildings – Gas Heat and Electric Cooling	\$6.6M	\$555,304	28.0%	3,439 (18.0%)	4.0
DES – 180 Deg F System (Recommended)	\$9.9M*	\$508,235	29.5%	3,209 (23.5%)	10-25*
DES – 120 Deg F System	\$12.8M	\$499,715	31.4%	3,146 (25.0%)	48.5
DES – 120 Deg F System with geothermal	\$19.4M	\$596,374	57.8%	3,178 (24.2%)	340

Old Business: DES Update for City Council

City Staff Recommended Path Forward

1. 180 Deg HW and CHW Loop System
 - Move forward with schematic design of this option with RPU
 - Budget included in 2021 CIP for consideration
 - Request DMCC support for plant expansion necessary to accommodate future private development
2. Backup Plan: High Efficiency Building-based system

Energy Commission

- Vote on whether to support this concept and next phase of analysis
- Send formal letter of support to City Council

Old Business

- Review Webpage Outline

New Business: City Green Team

Focus Areas

- GHG Emissions
- Transportation & Fleet
- Integrated Pest Management & Landscaping
- Waste Management
- Procurement
- Energy

New Business: City Green Team

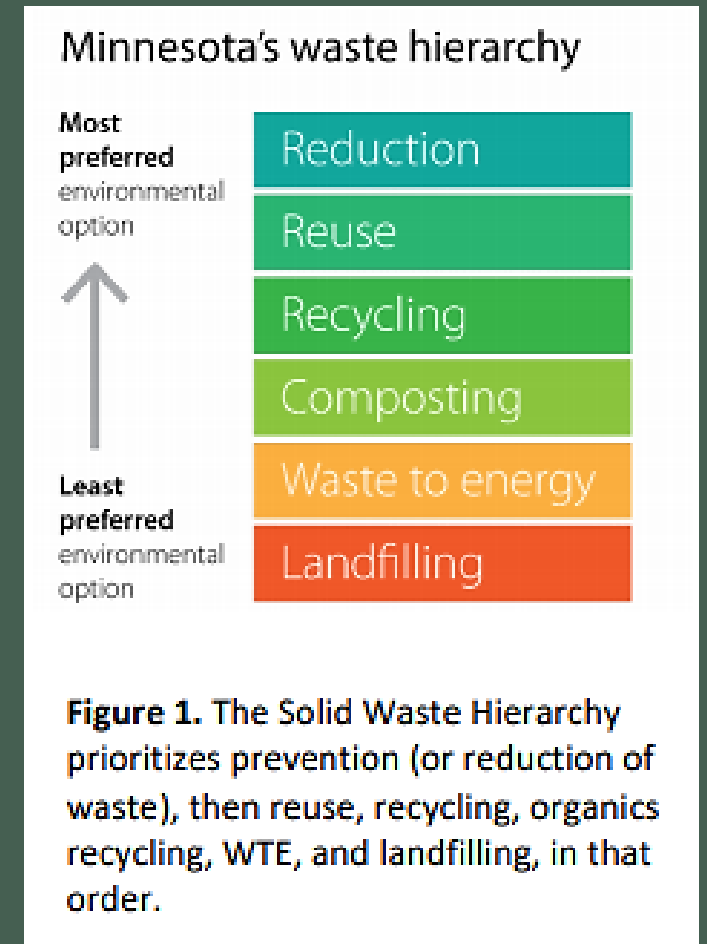
Focus Area: Waste Management

Goal

- Employ a waste reduction and recycling strategy to all City buildings, facilities, and operations.

Priorities, Categorized within Waste Hierarchy

- **Reduce:** Reduce paper use in City processes
- **Reduce/Recycle:** Challenge departments to conserve and recycle
- **Recycle:** Uniform waste & recycling at all City Facilities and Parks and Public spaces
- **Recycle:** Update the purchasing policies to require a larger post consumer content, and product recyclability



New Business: City Green Team

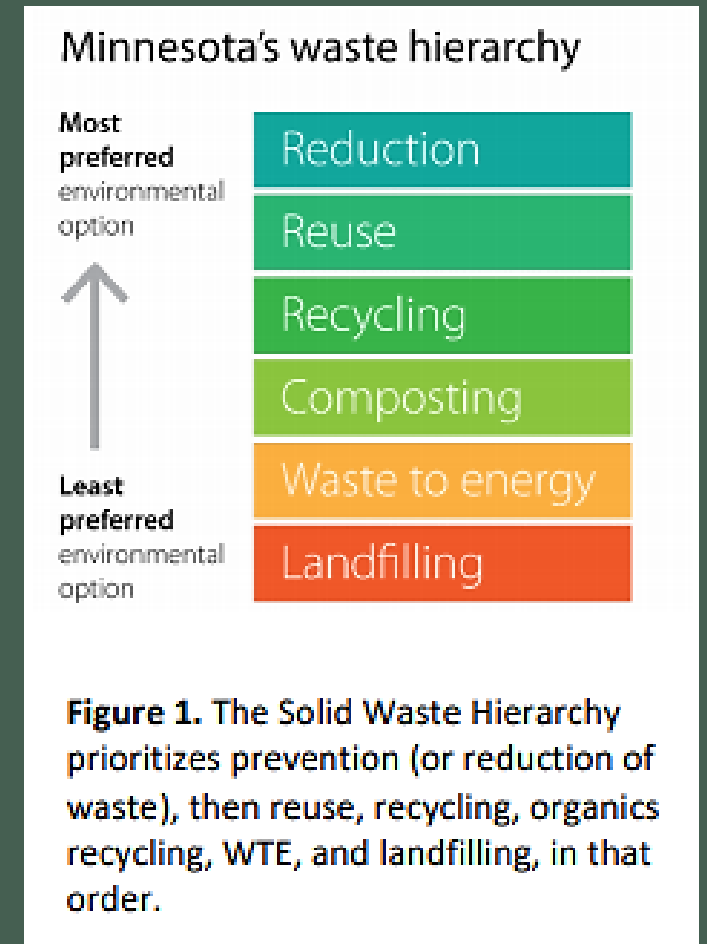
Focus Area: Waste Management

Goal

- Reduce municipal solid waste generation per capita by at least 15% by 2030 compared to 2015, 50% by 2030

Priorities, Categorized within Waste Hierarchy

- **Reduce:** Phase out or ban non-recyclable materials and single-use items in the City
- **Reduce:** Require zero waste strategies for events
- **Reduce:** Set food and organic waste reduction goals
- **Reuse/Recycle:** Improve reusability & recycling
- **Compost:** Implement organics collection



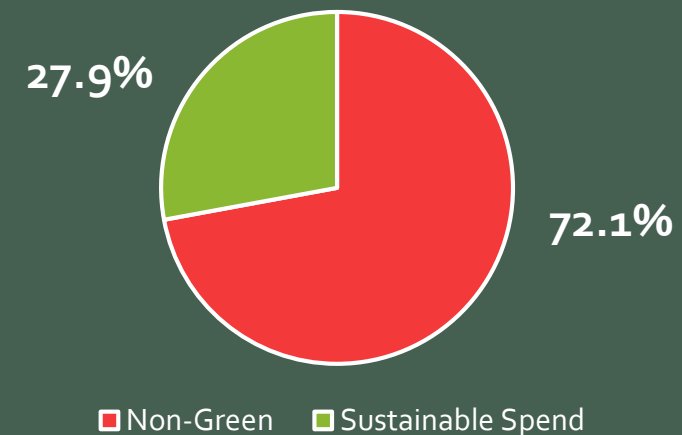
New Business: City Green Team

Focus Area: Procurement

OVERALL TOP 5 PURCHASES	
PAPER TOWELS/TP/WIPES	\$44,691.84
COPY PAPER	\$8,892.02
TRASH LINERS	\$7,206.92
HAND CARE	\$3,943.25
FOLDERS/BINDERS	\$3,216.21
TOTAL	\$67,950.24

BECKLEY'S + DALCO TOTAL SPEND	\$103,837.81
OVERALL SUSTAINABLE SPEND	\$28,938.60
NON-GREEN SPEND	\$74,899.21
% \$ SPENT ON SUSTAINABLE PRODUCTS	28%

2019 Purchases



New Business: City Green Team

Focus Area: Procurement

BECKLEY'S	
TOP 5 PURCHASES	
COPY PAPER	\$8,892.02
FOLDERS/BINDERS	\$3,216.21
PENS	\$2,466.88
CHAIR/ANTI-FATIGUE MATS	\$1,776.36
NOTEBOOKS/WRITING PADS	\$1,626.15
TOTAL SPENT ON TOP 5 PURCHASES	\$17,977.62
% SPENT ON TOP 5 PURCHASES	47%

MINORITY VENDORS	
TOTAL \$ SPENT ON MINORITY VENDORS	\$877.61
% \$ SPENT ON MINORITY VENDORS	2.27%

RECYCLED CONTENT DOLLARS	\$1,262.17
AS % OF BECKLEY'S TOTAL SPENDING	3%

New Business: City Green Team

Policy, Planning & Leadership

- Adopt Environmentally Preferred Purchasing (EPP) procedures.
- Establish a recycled paper policy including a target for recycled content and volume.
 - *Currently 1% for paper, 3% for all products*
- Set a target for the percentage of green products purchased through the City's office supply contractor.
 - *Currently 27.9 %*
- Set a target for the percentage of women and minority-owned business enterprises (WMBE) products purchased through the City.
 - *Currently 2.27%*

EAP Priorities

Updated Tracking Spreadsheet

- All 3 focus areas have been updated with notes
- Confirming with IT if we can share “view only” access to spreadsheet for Commissioners

EAP Priorities: Transportation

Priorities

- Evaluate transit conversion
- Electric charging stations & solar charging stations
- Increase public transit, reduce single occupancy trips
- Develop transportation corridors, nodes and parking to minimize VMT

EAP Priorities: Electric & solar charging stations

Pursue Federal, State and local incentives for EV infrastructure

- EVConnect
- Federal Highway Administration
- Thriving in the North
- U.S. Department of Energy; Energy Efficiency and Renewable Energy
- MPCA

EAP Priorities: Electric & solar charging stations

Install EV charging stations at libraries, community centers and other public-facing City buildings

Massachusetts Plug-in Electric Vehicle Program

- Public EV charging stations grew from 33 in 2011 to 596 in 2016, by a variety of venues including retail, short and long term parking, workplaces, dealerships, hotels, schools, recreational facilities and hospitals
- Number of personal EVs grew from under 100 in 2011 to 5,610 in 2016, 39% of which were battery EVs
- Clear correlation between where EVs are registered and where they publicly charge

DOE Office of Scientific & Technical Information – Impact of Public EV Charging Infrastructure

- Nationwide focus
- Correlation between awareness of charging stations and acceptance of EVs suggests we need more stations
- For public infrastructure, charging outside of home is inconvenient, workplace-type charging considered convenient

EAP Priorities: Electric & solar charging stations

Adopt EV-ready building codes & streamline permitting for EV charging

- Need this to build out infrastructure
- Examples include:
 - Charging stations required for certain percentage of parking spaces
 - Parking spaces must have an electrical conduit and wire to run electricity to charging stations in the future
 - EV-ready marked electrical panels near parking spaces
 - EV Ordinance: Requires a percentage of spaces in private and/or public parking facilities be designed and built with the necessary infrastructure

Publish & implement recommendations from EV Fleet Study

- Completed the study, could publish it

EAP Priorities: Electric & solar charging stations

Adopt a Green Fleet Procurement Policy

- Can base off our EV fleet study
- Chula Vista Municipal Fleet Electrification Study
 - Acquisition of 34 new EVs set to reduce annual fuel and maintenance costs by an estimated 50% in comparison to comparable ICE vehicles
 - Estimated cost to fuel the new EVs is 61% lower compared to the vehicles being replaced
 - Addition of 34 will yield estimated 80% reduction in GHG emissions

EAP Priorities: Increase Public Transit, Reduce SOV

Provide real-time transit & traffic information

- Reduces perceived wait time and actual wait time
- Commuters know what to expect/can plan routes, encourages use of public transit
- DoubleMap app, used by RPT to communicate real-time info

Case Studies

Seattle

- Users waited 2 minutes less than those using traditional schedule info
- Increased average number of transit trips by at least one trip per week for 35% of survey respondents
- Increased overall satisfaction with public transit for 92% of respondents

Chicago

- Average route-level weekday bus ridership increased 2% the year after tracking system implemented
- Weekday ridership increased by an average of 126 daily rides compared to routes without info

EAP Priorities: Increase Public Transit, Reduce SOV

Encourage employers to offer financial incentives for transit use, implement flex time to alter workday hours around transportation

- RPT presenting to Green Team this month, possibly pilot of program through Arrive Rochester app
- RPT currently offers employers a discount on annual passes for those who have 10% or more of their employees using the bus

Encourage employers to expand bicycle parking and offer/give access showers

- Find incentives or grants for financial assistance

Provide vulnerable populations with transit cost offsets

- Discuss feasibility with RPT, currently only offered to seniors & persons with mobility disabilities
- Could expand to include students, low-income, persons receiving SNAP benefits, etc.

Expand bike, scooter and car share programs

- Identify additional locations for bike share program, ways to increase program use
- Identify new opportunities for car share programs

EAP Priorities: Develop transportation corridors...

Implement infrastructure improvements including “complete streets” to facilitate alternative transportation modes for all travel trips

- Rochester has an adopted resolution
- Broadway corridor study

Implement transit-oriented development within Transit Priority areas

- TOD studies have been completed in Rochester
- Other Example: Rosslyn Ballston Corridor, Arlington, VA
 - Assessed value of land around stations increased 81% in 10 years
 - 50% of residents take transit to work, 73% within walking distance to stations

EAP Priorities: Develop transportation corridors...

Implement pricing strategies for public parking

- Dynamic pricing or congestion pricing that charge a higher price during peak demand hours

Case Studies

Stockholm City Center

- Immediate 22% drop in vehicle trips
- Decrease in travel times
- Large shift to public transit, 9% rise in inner-city bus ridership
- 14% decrease in inner-city exhaust emissions

Oregon.gov Research – Parking Demand Management

- Highly-correlated inverse relationship between increasing on-street meter charges and decreasing SOV use, similar effects observed for off-street parking monthly rates and daily charges
- Parking prices are most effective at reducing parking demand when changes primarily affect commuter and when high-quality transit alternatives to SOV are available
- Lower-income populations more sensitive to price changes, carefully consider pricing programs or identify strategies to reinvest revenues in the communities affected

Next Meeting

September 9th, 2020

- Discuss Future Agenda Items